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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/007,002	11/30/2001	- Michael Neal	DEM1P009	9261
36088 . 75	590 11/16/2006		EXAM	INER
KANG LIM 3494 CAMINO TASSAJARA ROAD #436			RUHL, DENNIS WILLIAM	
	DANVILLE, CA 94306		ART UNIT	PAPER NUMBER
<b>2, 3</b> ,			3629	
			DATE MAILED: 11/16/2006	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	10/007,002	NEAL ET AL.				
Office Action Summary	Examiner	Art Unit				
	Dennis Ruhl	3629				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1)⊠ Responsive to communication(s) filed on 14 Au	igust 2006					
<u> </u>						
· <u> </u>	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
·						
4) Claim(s) 1-6,9-11,14-19 and 25-28 is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6) Claim(s) 1-6,9-11,14-19,25-28 is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or election requirement.						
Application Papers						
9)☐ The specification is objected to by the Examiner.						
10) The drawing(s) filed on is/are: a) □ accepted or b) □ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:						
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)						
Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)						
2) D Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Da	te				
B) Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date  5) Notice of Informal Patent Application  6) Other:						
Paper No(s)/Mail Date 6)						

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Applicant's response of 8/14/06 has been entered. The examiner will address applicant's remarks at the end of this office action.

## 1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 5,10, are rejected under 35 U.S.C. 101 because they appear to be a mixing of two distinct statutory classes of invention. The recitation of "wherein a new data source provides new data subsequent to providing initial prices by optimizing prices" is a positive recitation to a method step. Claims 5 and 10 depend from apparatus claims. Apparatus claims that contain recitations that positively recite the use of recited structure in a method step are not considered statutory because the claim is bridging two distinct statutory classes on invention.

- 2. The following is a quotation of the first paragraph of 35 U.S.C. 112:
  - The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.
- 3. Claims 5,10, are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

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For claims 5,10, not disclosed in the specification as originally filed is that there is a "new data source" that includes an econometric engine and a financial model engine. It was disclosed that the price optimization system 100 (the system that is being claimed) has an econometric engine and a financial model engine, nothing was disclosed about a new data source having what is claimed. This is considered to be new matter. The examiner notes that applicant did not provide a showing of where support can be found for the newly added claim language and as far as the examiner can tell, this appears to be new matter.

For claims 26,28, the specification as originally filed did not disclose that optimization was done for "total sales *volume*". Applicant has stated that page 15, line 17, of the specification provides support; however, that portion states "The system can optimize for profit, revenue, and sales.". There is no mention of "total sales volume" as recited in the claims. The one word "sales" from line 17 (pg 15) could be a monetary amount of sales and is not necessarily a reference to sales volume. The examiner is concerned that this is new matter because the specification did not disclose "sales volume", but only stated "sales". Sales is not necessarily the same as sales volume. This limitation is considered to be new matter.

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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5. Claims 5,10, are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

For claims 5,10, it is not clear if these claims are apparatus claims or method claims. The recitation of "wherein a new data source provides new data subsequent to providing initial prices by optimizing prices" is a positive recitation to a method step in what is otherwise considered to be an apparatus type claim. One wishing to avoid infringement would not know if just having the system as claimed would be infringement, or if having the claimed system and using it in the claimed manner would be infringement (i.e. having a new data source provide new data subsequent to providing initial prices). It is also not clear if applicant is now trying to claim their invention as including the data source that provides the new data, in part due to the fact that the claim reads like a method step. Is the data source being claimed as part of the invention?

For claim 10, there is no antecedent basis for "the new data source", "the econometric engine", and "the financial model engine". None of these elements has been recited in claim 1, which is the claim that claim 10 depends from. These elements do appear in claim 5, but claim 10 does not depend to claim 5. Are these elements part of claim 1 as the language "the new data source" implies? The use of "the" implies that they were previously recited in claim 1, which they were not. Correction is required.

## Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 7. Claims 1-6,9-11,14-19, are rejected under 35 U.S.C. 102(b) as being anticipated by Reuhl et al. (5873069).

For claims 1,14, Reuhl discloses a method and system (with software) where sales and price data is entered into a computer system and the system then "optimizes" the prices of numerous products based on the inputted sales data. The software has a rule prioritizer with criteria (rules) for figuring out the final pricing of the products. The rules include looking for sales prices, advertised prices, etc., as well as applying a cent code to the resulting lowest price, and then checking to ensure that the new active price with the cent code is not greater than the competitor price. If the new price with the cent code results in the price being higher than the competitor price, then a new active price is calculated by incrementally relaxing the cent code rule (done by a rule relaxation module portion of the software). If the calculated price for a given item(s) is \$4.53, and the cent code rule requires the item to end in a 9, the price is changed to 4.59 in accordance with the cent code rules. Then the system compares the price of \$4.59 to the competitor's price to ensure that a higher priority rule (lowest price) is feasible. If \$4.59 is not the lowest price, 10 cents is subtracted to arrive at a new price, which is \$4.49 (relaxing the cent code rule that stated the price should end in 9, namely from

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\$4.53 to \$4.59). The incrementally relaxing of the rule results in the price changing from \$4.59 to \$4.49. This is done in increments of 10 cents at a time. The rules are prioritized as claimed because the rules for figuring out prices look to various conditions and moves on to other conditions if prior conditions are not feasible (result in the price being higher that the competitor). The storage medium of claim 1 is disclosed in column 3, lines 29-32. The steps of storing initial prices are satisfied because at some point you must input some kind of price into the system. This is inherent. Reuhl discloses a product designator for designating a subset of products to optimize prices for. This is because the computer system (software) only optimizes prices for products that have had new sales data entered into the system. So if sales data for televisions is updated in the system, the prices for batteries will not be changed. The examiner encourages applicant to read the entire patent to Reuhl, but also refers applicant to the following sections of particular relevance to the claimed invention. See column 6, lines 29-44; col. 7, lines 23-39; col. 8, lines 12-27; col. 10, lines 28-32; col. 11, and lines 26 to column 12, line 52.

For claims 2,15, the "N" products are the number of products that the new sales data relates to. N can be the number of televisions that prices are being optimized for.

For claim 3,16,25-28, Reuhl results in prices for items that are optimized for profit, total revenue, and sales volume. The intent of the price determination system and method of setting prices is to make money by selling your products. By ensuring that your prices are lower than competitor's prices, you are optimizing the prices for profit, total revenue, and sales volume at the same time. If you have the lowest prices in

a particular area for a given item, you will sell more of that item than you would otherwise sell if the price were higher, and this results in a greater sales volume, a greater total revenue (if you sell more of the items, you bring in more money), and a greater profit due to the greater sales volume.

For claims 4,9,17, with respect to "initial prices", once you run an optimization routine, the very last price prior to the optimization is the "initial price". Reuhl discloses what is claimed.

For claims 5,6,10,11,18,19, the claimed "new data" is the newly received pricing data that is used to arrive at new prices and the new price bound data is the identification of the product that the newly received pricing data is for. When a competitor changes the price of an item, data is received that identifies the product and the new price. The optimization methodology is then followed to figure out a new price. This satisfies what is claimed.

8. Applicant's arguments filed 8/14/06 have been fully considered but they are not persuasive.

Applicant has argued that the Reuhl reference is not directed to determining optimized prices but is directed to setting of prices to be the lowest price. Applicant states that the reference assumes that competitive pricing results in larger sales and increased profit. Applicant has stated that having lower prices does not necessarily increase sales volume and does not always result in increased profit. The examiner disagrees. To start with, the steps recited in the body of the claim that define

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applicant's optimization process are found in the prior art reference so the rejection is deemed proper. Applicant is claiming a process of setting prices that is disclosed by Reuhl, as far as the claim language goes. With respect to sales volume and profit, as admitted by applicant, having the lowest prices for a given product may result in increased sales volume and increased profits. That possibility is there, it may or may not materialize. It is very well known in economics that lower prices attract consumers and consumers don't want to have to pay more for a product than they have to. By having the lowest prices, this may result in increased sales volume and increased profits due to the increased sales volume for that given item. Also the increased sales volume and profit can be due to the fact that you get customers into the store by luring them in with the low priced goods. This is what Wal-Mart ™ does every day. They intentionally sell some products at a low price (lowest price in town) to get consumers into the store, with the intent being that the consumers will most likely purchase other items that have a greater profit margin, to then increase the sales volume and profit of the store overall. The intent of having the lowest price on some selected products is an attempt to increase sales volume and profit, by selling other goods to the consumers that are brought to the store for the low price items. Reuhl does teach a method of optimization. The argument is not persuasive.

Applicant has argued that Reuhl does not have a prioritized set of rules. The examiner disagrees because Reuhl clearly sets forth a methodology of going from rule to rule in setting the prices, with some rules being ignored to allow another rule to come about. The argument is non-persuasive.

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Applicant makes many references to the specification in conjunction with their arguments. The examiner notes that it is the claims and the claim language that should be discussed, not the disclosed invention. Many of applicant's comments are based on the disclosed invention and not the claimed invention. The argument about Reuhl having static rules that are not alterable rather than a dynamic prioritization of rules is noted, but is seen as an argument for the disclosed invention than the claimed invention. These aspects are not claimed and the examiner is not going to read limitations into the claims that are not there.

Applicant on page 13 continues to argue that low prices do not necessarily result in increased sales volume and increased profits. Applicant then states that there are numerous factors that affect sales, such as advertising, psychological effects, stocking costs, etc.. Can't the same be said about the instant applicant and the disclosed invention? If there are other factors that affect sales volume and profits, how can applicant ensure that their system will result in the right prices to achieve those same goals? It may be that applicant's optimized prices do not result in increased sales volume and profits either, because of psychological effects that are present in the marketplace or due to other factors. Those same factors must necessarily play a role to applicant if they play a role in Reuhl. The argument can be made that applicant's invention cannot guarantee anything as far as results go, because the other factors disclosed by applicant also affect sales. The main point that the examiner wants to convey is that the lowest price can and very well may result in increased sales volume and increased profits as claimed by applicant.

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9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dennis Ruhl whose telephone number is 571-272-6808. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Weiss can be reached on 571-272-6812. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DENNIS RUHL PRIMARY EXAMINER